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## SPECIAL ARTICLES

### A PLEA FOR A NATIONAL HEALTH ASSOCIATION

LEE. K. FRANKEL, Ph.D.

### THE ANTISYPHILITIC PHARMACOPOEIA OF FRACASTORIUS

THE HONOURABLE WILLIAM RENWICK RIDDELL

### RADIO TALK—THE SOCIAL HYGIENE MOVE- MENT—AN EDUCATIONAL POINT OF VIEW

PROF. B. A. BENSLEY

### THE TREND OF MODERN FOOD INSPECTION

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# The Public Health Journal

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## A Plea for a National Health Association

LEE K. FRANKEL, PH.D.

*Chairman National Health Council, New York City*

IN his address delivered at the meeting of the American Public Health Association in Chicago in 1918, Dr. George E. Vincent, President of the Rockefeller Foundation, pointed out with clarity and decisiveness the chaotic condition which existed among the voluntary health associations, national and local in character, throughout the United States. You will recall his statement that he found 57 varieties of health organizations of one type or another, engaged in some phase of public health development. In his concluding words, President Vincent recommended the calling of a conference of leaders in public health movements to see what could be done to bring about better and greater co-ordination in the voluntary public health work of the country.

Dr. Vincent's statement was the summation of views which had been held by many interested in public health for many years. Earlier consideration of this subject had been given at various times. As early as 1913, the Council on Health and Public Instruction of the American Medical Association called a conference of 39 health agencies to consider the matter, and appointed Professor Selskar Gunn to make a study of the problem. In Rochester, N.Y., in 1915, at the meeting of the American Public Health Association, an informal conference of sanitarians gave consideration to the matter but did not arrive at a definite conclusion.

Following Dr. Vincent's address, a special conference was called at the meeting of the American Public Health Association in 1919, which was followed by an offer on the part of the American Red Cross to finance an intensive study to be used as the basis of a plan of action.

Dr. Donald B. Armstrong undertook this study and subsequently presented an exhaustive report. This was eventually submitted to an informal conference of representative health associations for discussion and consideration. Subsequently, these organizations again met and organized themselves into what is now known as the National Health

Council. Under the constitution which was adopted, the objects of the council were the co-ordination of the activities of the members of the Council, and such other activities for the betterment of health as might from time to time be determined.

The Council is now 5 years old. Since its inception it has shown a consistent growth. In 1921 it had 10 members; to-day there are 14. In 1921, 6 organizations were tenants with the Council at 370 Seventh Avenue; to-day there are 17. In 4 years the business service has almost doubled. This service has attracted attention even outside the family circle and non-member organizations are availing themselves of it. It has saved its members time, worry and money formerly devoted to tedious business details.

Under the terms of the constitution, the autonomy of each organization has been preserved. No action has been taken by the representative of any society without first referring the matter back to his board of directors. Quite recently, the constitution has been amended, so that instead of having one delegate and an alternate from each member society, there are now three representatives, two of whom must be chosen from the board of directors. In order that the machinery of the Council might work more expeditiously, another step of importance was taken under which representatives, while accredited to member organizations, do not necessarily represent these at the meetings of the Council, but have the authority to vote as individuals.

In the 5 years of its existence the Council has accomplished a number of useful and worth-while results. It has succeeded in bringing about a spirit of co-operation, at least as far as the organizations are concerned, in that they have a common meeting place. The Common Service Committee of the Council, which was one of the first to come into existence, under the able leadership of Dr. William F. Snow, has effected a considerable time-saving and money-saving machinery, through the establishment of a central purchasing bureau and a central library. It has arranged for certain other details to be carried on in common, such as mimeographing, shipping, renting of offices, preparation of films, etc.—the whole involving a budget of over \$200,000, and representing a very substantial saving to the Council members.

In so far as the constitution permitted, the Council has attempted to carry on certain distinct phases of health work. It was among the first in the field to advocate periodic health examinations. The initiative which the Council took in this direction has permeated practically all the health work of the United States, and its effect has been shown very markedly in the efforts now being made by medical societies and others in developing a standardized form of examination and in interesting the large bodies of medical practitioners in the preventive side, as



well as the curative side, of medicine. The Council has also edited and sponsored the *National Health Series*, consisting of 20 booklets on various phases of public health, which has proved a most successful venture. Among its other activities it has issued mimeographed statements on proposed national health legislation and has published a series of authoritative reports on the health activities of certain federal bureaus.

Taking it all in all, however, even the best friends of the National Health Council cannot say that it has really accomplished the purpose which was in the minds of some of those who planned it. For all intents and purposes, it has been a gentleman's agreement. No constructive programme could be carried out without the consent and approval of the constituent societies, and in view of the fact that the autonomy of each one had to be preserved, it frequently placed the Council in a delicate situation to attempt work along any specific activity which might possibly interfere with the avowed purpose of one of the member societies. Developments, in themselves logical and desirable, have been retarded because they implied an infringement of member activity, or a consolidation of two or more lines of endeavour.

I am making these statements not in any sense of criticism. Had the Council accomplished nothing more than is stated above, its reason for existence would have been justified. I think it can safely be said that there is a greater spirit of co-operation to-day among the various national health agencies and a greater desire on the part of both executives and directors to get together and to discuss health matters from the larger viewpoint than could possibly have been the case had the Council not come into being. The fundamental purpose of the Council to co-ordinate the activities of its members has in a large measure been accomplished.

To-day, however, I feel that the Council is at the parting of the ways. If it is to accomplish the real mission of a national health organization, it must be more than an agency devoting its time largely to the mechanics of organization. Its purposes and aims must be more constructive. It must develop a unified programme for the larger purposes of the eradication of disease and the prolongation of life. It must have the means to do this adequately; it must have authority to go ahead in this broader field, without the constant fear that it may be overstepping its bounds and infringing on the activities and aims of any of its members. In other words, it must become more than a co-ordinating agency.

The question I should like to put to you to-day is this: Has the time come for us to think in terms of a larger and broader national health association? To put it as tersely as possible: Are we ripe in the United States for an attempt to unite the various national voluntary health associations in one compact body which shall not limit itself to campaigns for the eradication of any one particular disease, but whose main purpose

shall be reduction in morbidity and mortality through a concerted, unified attack on all diseases? Is it the psychological moment to think in terms of national health, rather than of specific disease? Are we prepared to visualize the eradication of tuberculosis, heart disease, cancer, venereal disease, child mortality, and insanity, not as separate entities, but as maladjustments of the human organism which require unified and concerted effort for their eradication? If we can answer these questions affirmatively, then I would ask you the further questions:

Is the National Health Council the organization through which union can be effected? Has it the nucleus for a larger, unified programme? Can it be reconstituted? Will its members consider the possibility of joint rather than individual effort? Can an amicable understanding be arrived at which shall make for union? If this is not feasible, is it desirable to bring about such union under the aegis of one of the member societies, or shall we consider the organization of a new national association of which existing associations shall become integral parts?

This raises the question as to which of the members of the National Health Council would be best adapted for such a purpose. Some years ago I had the dream that possibly the American Public Health Association might be such a unifying organization. It was originally established on the broadest basis. The specialized phases of work now being done by the National Tuberculosis Association, the American Child Health Association, the Society for the Control of Cancer, and others, had their origin in the American Public Health Association. In its earlier years the American Public Health Association did not have the necessary funds to do more than originate. As a result, specialized national groups came into existence. They undoubtedly have played a tremendous part in the reduction of the special diseases in which they were interested. More recently, the American Public Health Association has felt it desirable to become a distinctly technical and professional body, composed largely of health officers and other health officials.

Following the war there seemed to be a splendid opportunity for the American Red Cross to become the co-ordinator and unifier of national health activities. The Red Cross possesses special qualifications and a peculiar position in the American community which would enable it to unify our national voluntary health agencies. It may be claimed that its semi-official character might militate against any such effort on its part. On the other hand this might be a distinct asset. The Red Cross might even to-day become the nucleus for the type of organization I have in mind, if disaster relief, which is essentially sporadic, but for which it must be in constant readiness, could be made a minor activity.

On the other hand we have among the national voluntary associations included in the Council, the National Tuberculosis Association. This

organization is unique in that it is the pioneer organization of its type. It has a machinery of state and local affiliated groups ramifying throughout the country. Some of these have already developed as state and local health associations rather than as anti-tuberculosis associations. The association has a sound method of financial support, that is, the Christmas Seal and the association's contributing memberships, built through many years. The Christmas Seal has a glorious and inspiring history. Its strength lies in the fact that it solicits and receives donations from individuals, irrespective of social or financial condition. It has possibilities of widest expansion. Were it possible to generalize the Christmas Seal to expand both its appeal and its application—to use it not only for anti-tuberculosis campaigns, but for other phases of health development—all the major forms of voluntary public health activity would receive a degree and character of popular support which we have always striven for but so far have never been able to attain. There can be no doubt that the sales of Christmas Seals could be immeasurably increased, if the income could be applied for general health purposes.

If, however, none of these projects is feasible, if neither the Council nor the Red Cross, nor the National Tuberculosis Association can undertake the task of unification, then I would put up to you the question of the desirability of an entirely new organization, to be known as the National Health Association. At first blush you will possibly say that this is out of the question. I may agree with you. Everything depends on the point of view. If we are going to take the attitude that heart disease or cancer or tuberculosis still requires specialized organization we shall not get very far. If, however, we can grasp the concept that in our voluntary agencies we must follow the example of our official health agencies we shall have a sympathetic attitude toward greater co-ordination and eventual amalgamation and unity.

In practically every well-organized health department in the United States, the health activities are centralized in the health officer or the department of health. There are no heart departments or tuberculosis departments under separate commissioners. There is a division of communicable diseases, but this deals with all phases of transmissible or communicable diseases and not with any particular one. Necessarily the programme of one division must be thoroughly correlated with that of another. Tuberculosis affects not only the adult but the child. Necessarily the division of child hygiene, in the attempt to eradicate tuberculosis among children, must work in the closest harmony and be in constant touch with the division of communicable diseases, so as to prevent overlapping and duplication. All the bureaus or divisions of a modern health department are phases of a connected health programme, properly balanced and so constructed that the relationship of one disease

to another is clearly understood, and so organized that the fundamental purpose of the official organization is to reduce the incidence of all diseases, and not any particular one.

It seems surprising to the disinterested outsider that the official health agencies really should have advanced further in this respect than the voluntary groups. The development in other fields has been in the opposite direction. Official action has generally followed private enterprise. In the educational field the private school and the private tutor antedated the public school. In nearly all other activities of a communal nature, the same type of development has taken place.

Are we not at the point where these facts must be given definite consideration, and where we must readjust our mental processes to think in terms of health and of disease prevention in their entirety, rather than in terms of specialized endeavour? The recent action in New York City of the union of the New York Tuberculosis and Health Association, the New York Heart Association, and the Associated Out-Patient Clinics is extremely suggestive of the trend among local agencies. A committee on community dental hygiene has recently been formed in this association. Equally as significant is the change of the name of the New York Tuberculosis Association to the New York Tuberculosis and Health Association. I predict the time in the near future when this name will be shortened and we shall have in New York City the New York Health Association, which will have absorbed all types of voluntary health work. Equally significant is the close contact which is developing between the official and the voluntary health groups in New York City, so that one shall supplement and complement the other. Still more significant is the development of an Ohio social hygiene council in co-operation with the Ohio Public Health Association. The American Social Hygiene Association, wishing to inaugurate a state-wide social hygiene movement in Ohio, did so, not by setting up new machinery, but by availing itself of an organization already in the field, namely, the Ohio Public Health Association which, it might be explained, is the accredited tuberculosis association for that state.

In the social welfare field we have met this issue and are rapidly solving it. With few exceptions the larger communities in the United States have developed community chests. These approach the communal problems, not from the angle of any particular institution, but from the viewpoint of the community. Funds are raised through united effort and are entrusted to a representative group for distribution according to the need and the demand. Not only has the community chest succeeded in more adequately financing communal enterprises, but, as an inevitable result, those who are interested in the development of the chest are being educated in the community viewpoint rather

than the institutional viewpoint. Overlapping is being avoided. The amalgamation of communal societies and institutions is going on wherever it is feasible. Unnecessary organizations are disappearing. Research into community needs is being carried on. New agencies are being created as the result of exhaustive study. The result thus far in practically every community in which the common fund has been instituted has been along lines of progress and advancement. In some of these communities, the separate appeals which are coming from national voluntary health organizations for support are being questioned. The query is being put whether a joint appeal from the national health agencies cannot be arranged as it now is for local enterprises.

I have no ready-made scheme to propose. At this time I am asking for a thoughtful consideration of my suggestion. I am asking for a sympathetic hearing and for an approach to the problem with an open mind and with the realization that what we are interested in is health, and not disease. I am asking, in particular, that those who represent special interests in health work, particularly directors and executives, confer to see whether union is possible. Personally, I am confident that if any type of union could be brought about, a concerted appeal to the people of the United States for funds would immeasurably increase contributions and gifts.

It cannot be denied that many of our national associations are finding great difficulty in financing themselves. Special appeals must be made at frequent intervals for support. Those which have a clientele that can be appealed to are more successful than others whose special work may not make so much of an impression upon the giving public. This is unavoidable under our existing system of fund-raising, and yet, one organization may be equally as deserving as the other.

In conclusion, I am convinced that a united organization, whether it be through the Red Cross, or through the National Tuberculosis Association, or an entirely new organization, manned by representative men and women, with divisions and bureaus to cover every field of activity now covered by existing national health organizations, with a definite purpose to co-operate with official health bodies, either local, state, or national, could revolutionize health work in the United States. Not the least of its activities would be the education of 110 million people in preventive medicine and personal hygiene.

Possibly many of you will agree with me that only when we have unified effort, and only through the work of a unified association can we ever hope to bring about in the United States another dream which many of us have dreamed in the past, a united federal department of health.

# The Antisyphilitic Pharmacopoeia of Fracastorius---With Glossary

By THE HONOURABLE WILLIAM RENWICK RIDDELL, LL.D., D.C.L.,  
*President, Canadian Social Hygiene Council*

(Having left untranslated many of the terms employed by Fracastorius,  
I here collect and explain them.)

*(Continued from January)*

**Ammoniacum** (or **Hammoniacum**): Gum Ammoniac, a gum obtained by incision of the root and branches of the *Ferula Ammonifera* which grows very abundantly in the sands of Libya, where formerly stood the Temple of Jupiter Ammon; hence the name, "Ammonia" has nothing in common with the drug except similarity of derivation. (See *Serapinum*.) C., 5, 18: and many other places.

Dios., 3, 80—the fruit is called *Agasyllum*—the gum mollifies, heats, is ecbotic, useful for pains in joints, epilepsy, diuretic, &c. His editor identifies it with *Galbanum*.

*Charas*, p. 42, has an emulsion or milk of *Ammonia* for asthma.

**Amomum**: C. 3, 18: 5, 15, and many other places. A fruit about the size of a grape seed, brought from India—it contains purplish grains of a sharp taste and very penetrating odour. *Linnaeus* called *Ginger*, *Amomus*; but *Fracastorius* speaks of *Zingiber* as well as of *Amomum*. Dios., 1, 14, deadens pain, relieves inflammations of eyes and viscera, in a decoction used for liver, gout, kidneys, &c.—but be sure to avoid counterfeits.

*Quincy*, p. 77, speaks of this *Amomum Verum* as well as *Amonum vulgare*, the common bastard stone parsley.

**Amurca**: The dregs or scum of oil: hence *Fracastorius* calls it "*vilem amurcam*" *Syphilidis*, &c., Lib. II, v. 241. *Vergil* speaks of it in the *Georgics*, 3, 448.

"*Aut tonsum tristi contingunt corpus amurca*" or they sprinkle the ram's shorn body with miserable *amurca*. *Amurca* was in fact the watery part that flows away on pressing olives leaving the richer oil behind.

*Celsus*, 5, 7, 8 (16), uses it with sulphur for scabies: 6, 8 (1), for ulcerated nostrils, &c., &c.



Dios., 1, 120, recommends it for carious teeth and toothache, ulceration "sedis, genitalium uulvae" (the fundament, genitals, vulva), gout, articular pains, dropsy, &c.

Aparine: Galium Aparine, Goose-grass, Cleavers.

Dios., 3, 86, useful against viper-bites, earache, scrofula, &c.

Apium: Apium graveolens, Smallage (Fr. Ache). Celery is a variety—Apium graveolens dulce. Another variety is Turnip-rooted Celery, Apium Graveolens rapaceum.

Celsus, 2, 30, considers it astringent, useful against hysteria; 5, 25 (2), anodyne, &c.

Dios., 3, 62, diuretic, constipating, useful in inflammation of the eyes, a cough medicine, emmenagogue, &c.

Les., p. 15, cures pain in liver, drives away ventosities, diuretic, emmenagogue, laxative for

Qui veut bien vivre et longuement

Du corps fault purger l'excrement—who wishes to live well and long, must purge the body of excrement.

His editor says, p. 132, that in this Lespeigney has in mind Persil while the Apium or Ache of the apothecaries is Apium graveolens. Les., p. 69, speaking of Apium in another chapter, considers it the same as Apiastrum and calls it Melisse. The leaves applied on the bite of a rabid dog prevent danger—the same in snake-bites—it is laxative, cures toothache, and makes aching joints sound again. Culpepper, p. 346, says it is diuretic and good against jaundice, tertian and quartan agues, "to kill worms and to help a stinking breath".

Quincy, p. 122, thinks it diuretic: "it also assists in cleansing the liver and is good in the jaundice."

Aristolochia: Birthwort—several species are bitter, tonic, stimulant and aromatic, once believed to be emmenagogue. There were two species favoured by the old herbalists, Aristolochia longa and Aristolochia rotunda.

Celsus does not distinguish—5, 26 (35), he recommends it in deep wounds; 5, 15 (7), in suppurations, &c., &c.

Dios., 3, 4, distinguishes three kinds—all useful against snakes and poisons, hiccough, pain in the side, &c. Neither speaks of its supposed virtues as an ecboic.

Quincy, p. 77, gives it credit for being ecboic and emmenagogue and "having some alexipharmic qualities".

Arthritic Pills are for the gout. Quincy (261) gives the formula Resin of Jalap  $\frac{1}{2}$  oz.: Extracts of Rhubarb, Birthwort and Gentian each, 1 dr.; Tartar of Vitriol and Diagrydium each,  $1\frac{1}{2}$  dr.; Vitriol of Iron, 2 dr., make into a mass with extract of Senna.

Charas, p. 223, gives a formula for Arthritic Powders of Hermodactyl, terebinth, costus, mechoacana (jalap) and scammony with sugar.

**Arum:** *Arum maculatum* of the older writers, in England called Wake-robin, Cuckoo-pint or Cuckow-pint (Quincy).

Culpepper, p. 138, calls it "Cuckow-point, abron, janus, barba-arón, calves' foot, ramp, start-wort, cuckow's pintle, priest's pintle and wake-robin"—it is a "most present and sure remedy for poison and the plague"—it is diuretic, emmenagogue, ecbotic, heals the itch and "its fresh roots bruised and distilled with a little milk yield a most sovereign water to cleanse the skin from scurf, freckles, spots, or blemishes whatsoever therein".

**Aspalathus:** is much like *Agalochus* in taste, odour and medicinal qualities, but differs in colour—it has been called Eagle-wood and Aloe-wood. Celsus, 5, 24, makes it an *acopus*, i.e., a drug useful in childbirth as an ecbotic, and also helpful for the nerves.

Dios., 1, 19, gives it the same virtues and adds diuretic and constipating powers.

Pliny has several references to it and its medicinal powers, agreeing with Dioscorides.

**Asparagus:** *Albae vitis*, the shoots of the *Vitis alba*, i.e., the Bryony (in French, Bryonne ou Coulevrée)—this plant has slender, velvety, tender shoots which are much like our garden plant, asparagus, and which grow very fast. The plant is very like the vine in its leaves, which are white, and it produces small grapes, green turning to red when ripe—the root is used in medicine. The poem describes the shoots:

. . . *albae asparages nunc collige vitis*  
*Cum nondum explicuit ramos umbracula nondum*  
*Texuit, et virides jussit pendere corymbos."*

"*Syphilidis*", Lib. II, vv. 155-7:

"Gather the asparagus of the bryony when it has not yet unfolded its branches and not yet formed its leaves and ordered its green clusters to hang down."

Celsus, 2, 17, 29, makes it laxative, and 4, 9, useful in Splenitis.

Dios., 2, 118, recommends for dysuria and dysentery—also for curing sterility.

**Asplenium:** Spleen-wort, a whole family of ferns of which the Wall-rue and Lady Fern are species; here, probably, the *Asplenium* is the French Ceterach or Doradille, called by Fracastorius in his "*Syphilidis*", Lib. II, v. 180, "*Sterile Asplenium*"—because it seems destitute of seeds as they can be found only on close examination, but including perhaps the Hart's Tongue and *Scolopendriums*.

Dios., 3, 127, calls it also Scolopendrium—it acts on the spleen and is useful in jaundice (*morbus regius*), allays hiccuph and breaks vesical calculus—"it is believed to prevent conception . . . they say that it should be gathered at night in the absence of the moon".

Les., p. 84, can only give it credit for being aperitive—he calls it Scolopendria, ceterach, asplenon, langue cervine hemionitis.

Culpepper, p. 351, calls it Spleenwort or Ceterache "generally used against infirmities of the spleen; it helpeth the strangury and wasteth the stone in the bladder and is good against the yellow jaundice and the hiccuph; but the use of it in women hindereth conception. (It may be that Fracastorius gave a hint of this supposed quality when he spoke of "Sterile Asplenium").

Quincy, pp. 84, 123, says that it is littled used, "though it is accounted binding and strengthening".

New Disp., p. 112, allows it for strengthening the tone of the intestines and as an expectorant but scoffs at its supposed effect in "diminishing the spleen".

Astera: Aster. Amellum, q.v.

Aurantium: Citrus Aurantium, Sweet Orange, unknown to Celsus: the editor of Dioscorides, 1, 131, p. 81, in his note on Mala, *i.e.*, Apples, says (with a note on the Lemon): "There are also citrons fruits inferior in the opinion of physicians which, from the golden colour, are called Aurantia, by the Germans, Pomeranzen, and by the French, Aurenges, with a double taste sweet and sour." No therapeutical virtues are attributed to it.

Culpepper, pp. 278-280, describes five kinds: and "besides their use in banquets they are very effectual for strengthening the heart and spirits".

Quincy, pp. 199-200, treats of Oranges, Lemons and Citrons together, but does not think much of them.

Auripigmentum; is not with Fracastorius what is usually called Arsenic trisulphide ( $As_2S_3$ ), Orpiment, King's Yellow: he does not approve "priorem illam speciem quae citrina est, sed alteram quae est russa et proprie Sandaraca vocatur"—the former species (commonly called "Vernix") which is yellow, but another which is red and is properly called Sandaraca, *i.e.*, the Auripigmentum rubrum, Realgar, Ratsbane, a native arsenic disulphide,  $As_2S_2$ , Red Orpiment, Red Arsenic, the Sandaraca of the Romans, Sandarake of the Greeks—the former being Arsenicon. Celsus says, 5, 5: "auripigmentum quod arsenikon a Graecis nominatur (huic autem et sandarachae in omnia eadem vis, sed validior est)"—auripigmentum which is called "arsenikon" by the

Greeks; it has almost the same effect as Sandaraca in all cases but is more powerful. Celsus, who refers to it many times, adopts the Yellow; Fracastorius, the Red.

Dios., 5, 70, speaks of both kinds and prefers the yellow (or golden) which is produced in Mysia—it is astringent and erodent, a depilatory.

**Axungia Porcae** (or *Porcina*): Hog's lard. See *Adeps*, *supra*.

**Balsamum**: Balm of Gilead (or of Mecca): gold colored resin, from the *Balsamodendron Gileadense* or *B. Opobalsamum*—not the American Balm of Gilead which comes from *Icica carana*. C. in many places. Dios. 1, 18, brings it from Judea or Egypt: it is detergent, clears the eyes, is ecbotic and emmenagogue, clears foul ulcers, is diuretic and taken in milk is an antidote against aconite and snakebites. *Opobalsamum* is the Syrian, a superior variety.

Les., p. 30 calls it *Basme* (*i.e.*, Balm) or *Opobalsamum*: he says that it grows "en Babiloine . . . et en une partie de Judée"—it is approved against the Iliac Passion, cures headache, is good for old sores and pains in the stomach.

Quincy, p. 133, speaks of it most highly—he brings it from Judea or Mecca—all inward decays, bruises and sores are relieved by it, particularly renal.

**Barbuli**: a fresh water fish, the Barbel, *Barbus vulgaris*, one of the Carps and so called from the fleshy filaments, hanging from the mouth like a barbell, little beard.

**Bdela** or *Bdellium*: a yellowish or reddish gum from Arabia, Persia and India. C. in many places, espec. 5, 4, where it is ranked among the aperients. It is the product of many of the *Amyridaceae*, esp. the Genus *Balsamodendron*.

Dios. 1, 69, says some call it *Bolchon*, others *Madeleon* and that it is the "tear of a Saraïen (Scythian or Arabian) tree"—it breaks calculi, is diuretic, and is usefully administered for coughs and snakebites.

Les., p. 27, makes it emetic, diuretic, dissolves calculi, in surgery it makes a good plaster for old wounds, cures coughs, is constipating.

Quincy, p. 111, recommends it in diabetes, hypermenorrhoea and in leucorrhoea.

**Benedicta**: The former name for *Geum rivale*, Purple or Water Avens: it is sometimes used for the *Carduus benedictus*, q.v.

For *Pilulae Benedictae* see *Pilulae*.

**Betonica**: *Betonica officinalis*, Betony, Wood-Betony, (or *Stachys Betonica*). Dios. 4, 1. leaves are ecbotic, it is useful against

snakebites and poison, in diseases of liver or spleen, diuretic, effective in jaundice (*regius morbus*), &c.

Les., p. 29, "Profitte à la partie basse

Des femmes . . . . .":

useful in bites of lower animals, diuretic,  
stops spitting of blood and in pain in the  
kidneys is sovereign.

Culpepper, p. 81, gives it credit as a prophylactic against epidemics and "from witchcrafts also" and as an excellent digestive in "weak stomachs . . . sour belchings and continual rising in the stomach": good for gout, epilepsy, convulsions, jaundice, coughs, colds, bite of mad dogs and venomous serpents, &c., &c.

Quincy, p. 56, thinks it diuretic, a very good cephalic and useful to a woman after a hard labor.

Bistorta: *Polygonum Bistorta*, Snakeweed, Passion-dock, Adderwort—"is supposed to have bloomed on Calvary and to have been sprinkled with the drops of blood which fell from Christ's side—hence the pink stains on its white flower heads and the dark blotches on its green leaves". See *Tormentilla*, *post*.

Dios. 4, 4, useful for costiveness, dysuria, and against snake-bites, checks hypermenorrhoea, &c.

Culpepper, pp. 86-88—it "expelleth the venom of the plague, the smallpox, pimples, measles or any other infectious disease"—prevents abortion—"if the juice of the plantain be added to the leaves, and outwardly applied it much helpeth the gonorrhoea or running of the reins".

Quincy, p. 91, good against vomiting, spitting of blood and all haemorrhages, a diaphoretic.

Bole, Armenian: An astringent, pale-red colored earth from Armenia, formerly used as an antidote and styptic—also in tooth powders. It is a native clay or silicate of aluminum, containing considerable Oxide of Iron. Unknown to Celsus and Dioscorides.

Les., p. 26, a red drug from Armenia, styptic, prophylactic against the plague, cures pulmonary ulcers.

Quincy, p. 97—"it is both a noble astringent and a vulnerary . . . . . often prescribed for diarrhoeas, haemorrhages, catarrhs and all kind of defluxions".

Borago: *Borago officinalis*, Borage. This is the bubulus of Celsus, 4, 173—"Lienis quoque bubulus utiliter esui datur"—and bubulus is usefully administered in consumption of the spleen.

Dios. 4, 112, confounds this with *Buglossus*; and Culpepper treats them together while Quincy ignores both.

**Bryonia:** *Bryonia alba*, Psilothrum, White Bryony. Fr. Couleuvrée, a drastic cathartic. (This is not the Bryon of Dioscorides 1, 20: 4, 43; that was a Lichen of the Genus *Usnea*).

Culpepper, p. 92, calls it wild-vine, wood-vine, tamus and Our Lady's seal—its qualities are purgative, ecboic, diuretic, &c. "it breaks hard imposthumes, draws forth splinters and broken bones, dissolves congealed blood" and is emmenagogue.

Quincy, p. 77, prescribes it for all hysterical complaints.

**Bubonium:** *Aster Atticus*, see *Amellum*.

**Buglossa** (*Buglossus* or *Buglossum*): *Lycopsis* (*Anchusa*) *arvensis*, Bugloss. Sometimes applied to the *Helminthia echioides*, Prickly Ox-tongue. Dios. 4, 112, treats of *Buglossum seu lingua bubula* as an herb useful in abscesses. His editors have identified this plant with *Borago*, and I think properly.

Les., p. 27, "it is good when one shakes in fever—it drives away hoarseness and renders the voice clear. "Ainsy que mon auteur declare".

**Bulalapathum** or *Bulapathum*: generally *Patience* or *Patience Dock*, *Rumex Patientia*: here, however, it is *Bistorta*, *Polygonum Bistorta*, *Passion Dock*, still called *Patience* in the North of England.

See *Bistorta supra*. *Lapathus* is a generic name for all Docks:

*Bulapathus* means literally *Ox-dock*.

**Bulbi** (*salaces*): Onions, *Allium Cepa*, *Caepe*, C. in many places. See *Caepe infra*.

**Butyrum** (*recens*): (Fresh) Butter.

**Caepe:** *Cepa*, *Allium Cepa*, Onions. C. 2, 18, 22, 26, 27, 31, 32: 3, 20, 21, makes them hard to digest, too acrid, inflating the stomach, heating, *album moventes*, diuretic, soporific, lethargic, but helpful to a *lingua resoluta* and very nourishing.

Dios. 2, 144, gives the juice mixed with honey as an eye wash—it is emmenagogue, useful in alopecia, in a decoction cures headache, is diuretic and laxative.

Dios. 2, 145, treats more particularly of the *Allium*—and Celsus also distinguishes. The *Cepa* is rather our Chives and the *Allium* our Onion.

Culpepper, p. 274, thinks they are emmenagogue, help the bite of a mad dog and increase the sperm—a vermifuge, good for coughs, expectorant—"the eating of onions fasting with bread and salt is . . . . a good preservative against infection" (He does not say—because it keeps everybody away). Many other valuable medicinal properties are attributed to the palatable bulb.

Quincy, p. 137, prescribes them roasted or sliced in malignant and epidemic distempers—Paracelsus applied them to the part



bit by a mad dog—"Roasted and applied to the ear, they help to ripen, break and cleanse away imposthumes in the head"—and I have seen roasted onions applied scores of times for earache.

*Calamenthus*: former name *Melissa Calamintha*—*Calamintha Nepeta* (or *C. Acinos*) is Calamint or Basil Thyme—the *C. officinalis* is considered a distinct species. They are all Labiates.

Dios. 3, 34, against snakebites, emmenagogue, ecboic, diuretic, useful in jaundice, ischias, elephas, &c.

Les., p. 41, speaks of two kinds, identifiable as *Melissa Calamintha* and *M. Nepeta*,—odorous, good for the chest, useful against cough, rheum and lepra, to cure bites of beasts and to kill the worms which burrow in the ears.

Culpepper, p. 107, calls it Calamint or Mountain Mint—emmenagogue, diuretic, good in yellow jaundice, vermifuge, and "driveth away venomous serpents". As for the compound syrup of calamint, "let no woman be too busy with it, for it works very violently upon the female subject."

Quincy, p. 158, does not think much of it although "reckoned by some to be hepatic, pectoral and uterine, to promote urine, the menses and forward delivery".

*Calamus aromaticus*: now *Acorus Calamus*, the Sweetflag; but in *Fracastorius'* time, it seems to have been an Eastern aromatic plant or plants—perhaps the *Andropogon Schoenanthus*, the sweet scented Lemon-grass of Malabar. Celsus, 5, 24 (1) speaks of the *Calamus Alexandrinus* as a nervine—his other references are to the *Calamus scriptorius*, the reed for writing—as a means of administering medicine, &c. In view of the great doubt as to the true meaning, I do not cite other authorities. The editors of *Dioscorides* do not lend much assistance in this case—See Dios. 1, 2: *Acorus*, &c.

*Calendula*: *Calendula officinalis*, the common English Marigold, formerly considered aperient, diaphoretic; and much approved in cancer.

*Calx*: Lime—used recently prepared. C. 5, 6,—a "Rodent"; 5, 7, an "Exedent", &c., &c.

*Camphor*: Camphor, from the *Camphora officinarum* or *Laurus Camphora*. *Camphorosma monspeliaca* (Linn).

Les., p. 41, gives a reference to *Dioscorides* which I cannot trace—the only virtue the Frenchman gives it is to moderate heat in the eyes. Charas frequently used it and has, (p. 289), special "*Trochisci de camphora*" of red roses, Calabrian manna, santal, licorice, ivory scrapings, gum Arabic, tragacanth, spike-nard, aloë-wood, crocus and camphor. It is used in fevers, phthisis, jaundice, &c., Quincy, p. 161, speaks of its supposed antaphrodisiac and sterilizing qualities—but thinks little of it.

**Canna:** Reed of many kinds—*e.g.*, the *Canna Indica*.

**Capnus:** the Fumitory, *Fumaria officinalis*—*Capnus* is the Latinised form of *Kapnos*, the Greek word for "Smoke"—"*Fumaria*" is from the Latin "*fumus*", "smoke".

Dios. 4, 95—"chewed, the herb causes the flow of bilious urine".

Les., p. 54, calls it *Fumeterre*—it cleans the eye and "makes the spleen healthy and gay".

Culpepper, pp. 182, 183, "very effectual for liver and spleen . . . . cureth the yellow jaundice and expelleth it in urine . . . ."

Quincy, p. 125 recommended in jaundice and hypochondriacal cases, hence called *Melancholifuga*.

**Capraria:** Common name for *Consiligo*. *Pulmonaria* or *Enneaphyllon*, q.v.

**Carduus** (or *Cardo*) *benedictus*: *Cnicus benedictus*, (*centaurea benedicta*) the Blessed Thistle.

**Carpui:** the Carp, *Cyprinus carpio*, from *Carpa* (late Latin found in Du Cange) the name possibly derived from the *Carpi* a people living on the Danube—the word is not Classical Latin.

**Carica:** Dried Figs: *Celsus' Ficus arida*. C., 4, 9 given for splenitis, and elsewhere. Dios. 1, 145, approves of fresh raw figs and gives a long list of their virtues.

Les., p. 53—thinks them good against a cough and they make a good pulse but breed worms, they purge kidneys and bladder, cure dropsy—he says he himself was a fig merchant when the troops marched against the Emperor (Charles V) but the story got about of poison and he lost a great deal for he had to throw away grapes and figs, baskets and all.

Quincy, p. 130, pectoral, diuretic, ecboic, clean suppurating and pestilential buboes, &c.

**Caryophyllis** (us): *Dianthus Caryophyllus*, clove pink, the original *Carnation*: here probably cloves.

**Cassia** (or *Casia*): an inferior kind of *Cinnamon* from the *Cinnamomum Cassia*, C., 3, 21, makes it diuretic: 4, 20, useful in pains in the bladder: 5, 11, a discutient: 5, 27 (7) to be drunk if bitten by *cerastes* or *dipsas* or *haemorrhoids*, &c.

Dios. 1, 12, speaks of several kinds—it is useful as a medicine for the eyes and in *lentigo*, it is *emmenagogue* and an antidote to *vipers' poison*, cures intestinal inflammations and as a *suffitus* is effective in dilatation of the *vulva*.

Les., p. 34, speaks both of the *Fistula* and (this) wood,—aromatic, consolative, cures the *morbus commitialis* (epilepsy), diseases of kidneys, brain, spleen, stomach, removes evil odor from mouth, cleans out the tubes of the liver, is *emmenagogue*, cures pain in the heart, &c., &c.

Quincy, pp. 85, 176, thinks little of *Fistula* (*i.e.* pods) and Bark.

*Casia siliqua*: Cassia pods: known sometimes as *Fistula*. See *ante*.

*Cavacini*: a kind of fish I have failed to identify.

*Cedria*: the oil or resin from the Cedar of Lebanon, *Cedrus Libani*, q.v.

*Cedrus*: the Cedar of Lebanon, *Cedrus Libani*: the resin and oil were used. Horace and Juvenal, when they thought odes or sayings worthy of immortality, said they were worthy of being anointed with oil of cedar, "*linenda cedro*".

Celsus, 5, 11, makes *Cedrus* a discutient: 5, 18 (35) gives it in podagra. Dios. 1, 89, gives it wondrous virtues—it preserves the dead while it corrupts the living—a good eye-wash, kills worms in the ear—"idem facit cum ex aceto colluitur peruncto ante coitum genitali abortium fieri constat", useful in elephantia, &c., &c.

*Cerasus*: *Prunus Cerasus*, the Garden Red Cherry. Celsus, 2 24, "*stomacho aptissimi*": 2, 27 refrigerant: 2, 29 laxative.

Dios. 1, 129, gum diluted in wine for chronic cough, sharpens sight and provokes appetite: diuretic, &c., &c.

*Chalcanthemum* (or *Chalcanthum*): generally *Atramentum* (or *Atramentum*) Iron Sulphate, Green Vitriol, but sometimes Zinc Sulphate, White Vitriol—Copper Sulphate was Roman or Blue Vitriol but was also called *Chalcanthum* as was the ink made from it, under the name *Atramentum sutorium*, C. 1, 2, 6, 7, 8. Dios. 5, 64 astringent, calefaciant, vermifuge, emetic, antidote for poisonous fungi, caustic.

*Chalcitis*: Colcothar, Red Oxide of Iron, Ferric Oxide, Fe 2, 03- C. 5, 1, a styptic; 5, 2, a vulnerary; 5, 5, a purgative, &c., &c. Dios. 5, 65, a caustic for callus, fistulas, &c.

*Chalcitis* is sometimes, however, synonymous with *Chalcites*, Copper Sulphate, Copper Ore, C. 12, 5, 6, 7, 8, 9, 12.

*Chamaedrys*: *Teucrium Chamaedrys*, Wall Germander (Linn.); in pure Latin *Trixago*, *Trisago* or *Trissago*. See Pliny, *Nat. Hist.*, 15, 80. Pliny says it was also called *Chamaerops* and *Teucrium*, and advises it against serpent bites, coughs, it is good for the spleen, a diuretic and emmenagogue, useful in dropsy and for an eyewash. Celsus, 4, 6, says the rustics successfully use *Trixago* in an infusion for coughs, "without the doctors", 8, 9, speaking of danger of cough in a patient with broken ribs he says: "If the cough is troublesome there should be taken for it, a potion made from *trixago* or *ruta* (*rue*) or from the herb *stolchas* (*lavender*) or from *cumin* and *pepper*".

Dios. 3, 93. *Trisago* or *Iris Chamaedrops*, abortifacient, for

indurated spleen, dysuria, incipient dropsy, vermifuge, emmenagogue, ecbolic. A wash for eyes, good against snakebites.

Les., p. 31, antidote for poisons, good for eyes and cough, spasms and hard spleen.

Culpepper, p. 189, for coughs, hard spleen, dysuria, &c., or following Dioscorides closely.

Quincy, p. 124, is not enthusiastic—it may be “diaphoretic and prophylactic against epidemics” and “is accounted splenetic, hepatic and diuretic”.

Chamaemelinum: adjective from Chamaemelum, *Anthemis nobilis*, Garden Chamomile. The adjective is applied to Oleum, &c.

Dios. 3, 131, makes it emmenagogue, ecbolic, diuretic, lithontriptic, and useful in inflammation, and the iliac passion, purges bile, cures the liver.

Les., p. 40, “breaks the stone, provokes the flow . . . . good for eyes, spleen and jaundice”.

Culpepper, pp. 108, 109 has a long list of its virtues. It will be enough to cite one: “drives away all sorts of agues, if the party grieved be anointed with that oil taken from the flowers from the crown of the head to the sole of the foot and afterwards laid to sweat in his bed: this is Nichessor the Egyptian’s medicine”. Perhaps what he has “seen tried” may be of interest: “viz: That a stone that hath been taken out of the body of a man being wrapped in camomile, will in a short time dissolve”—No wonder, then, that “it is excellent for the stone”.

Quincy, p. 70, allows it as an anodyne, good for toothache, a cardiac and carminative.

Chondrilla: *Condrilla*, q.v.

Cicerbita: *Cicer arietinum*, the Chick Pea. Dios. 2, 96, makes it good for dropsy and jaundice, a diuretic.

Cichorium, Chichoria; *Cichorium Intybus*, Common Chicory; sometimes *C. Endivia*, Endive. See *Intybus*, *post*.

Cinara or Cynara: *Cynara Scolymus*, the true Artichoke.

Cinnabaris or Cynabaris: Cinnabar, red sulphate of mercury,  $Hg_2S$ —here the native ore, generally impure. Dios. 5, 56—an eye medicine, styptic, and caustic.

Les., p. 96, under the name “Vermillion” or “Cinabron”, “gives relief to swellings for it is desiccative”.

Quincy, p. 80, “the common vermilion of our painters . . . a wonderful remedy in epileptics . . . some use it in venereal diseases . . . extremely safe . . . good against worms . . . a plaster with frankincense . . . applied to the stomach and wrist for agues.”

(To be continued)

## Radio Talk

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### *THE SOCIAL HYGIENE MOVEMENT—AN EDUCATIONAL POINT OF VIEW\**

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A field so obviously varied in general outlook as that of social hygiene must of necessity be one in which there is a great deal of diversity of opinion both as to advisable lines of action and especially as to primary causes and effects. There is, of course, a considerable body of physical facts, especially concerning communicable diseases, but no one in all probability would assume that the treatment of these even in a social sense constitutes anything like the whole purpose of the social hygiene movement. What we observe in general is the expression from a variety of spheres of life of a common sentiment seeking co-operation. This sentiment appears to be based on the consciousness of certain trends of society that are injurious, perhaps increasingly so, and implies that the customary arrangements of society have not been able to cope with them. Under these conditions it is surely advisable that the situation should be outlined as it occurs to different elements, and no apology need be offered for a few reflections presented from an educational, and because of the writer's associations, biological, point of view.

Doubtless everyone who has looked into the matter knows that the social hygiene movement has, or perhaps had, a solid basis in relation to sanitary science and public health. But in contrast to the ordinary points of view both of medicine and of public health service, the outlook is social, its position as a field of study sociological.

Workers in the field of social hygiene are gradually bringing together the necessary facts concerning the incidence of social diseases. But both because all social implications are broad, and because control measures are largely outside of the range of ordinary preventive and physical treatment, the success of the movement will depend for a long time to

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\*Based on a radio broadcast for the Canadian Social Hygiene Council under the title "The University Man of To-day."

come upon the creation of wholesome public sentiment. And, needless to say, the movement itself will be represented by workers and leaders of very different training, vocation, and habit of mind.

The social hygiene movement is fortunate in being able to command with little advertisement a great deal of public respect because of constructiveness and obvious sincerity of its purpose. On the other hand, it is based, to a very considerable extent, upon a class of information, sociological in a broad way, and also technical, either in relation to science at large or to the professions. This information is advanced and intricate, even to well-informed persons in other fields, and it must be far more generally assimilated before much can be expected in the way of combined action.

Educated opinion has an obvious place and duty in this regard, and the situation presents both an opportunity and a challenge to those members of the community who, as university men and women, students, teachers and graduates, may be expected to have a more critical outlook upon the problems of social reconstruction.

It is scarcely necessary to point out that the effectiveness of the movement will depend upon the balance to be established by intelligent co-operation. Many a good humanitarian cause has been weakened by over indulgence of sentiment, or in some cases unfortunately of mild neuroses which tend to drive beyond the limits both of reason and of propriety. This is especially true of the field of social hygiene, where, in view of the necessity of some publicity, good judgment becomes the only safeguard of the sanctity of human relations.

One of the impressive features of the social hygiene movement is the breadth and spontaneity of the support which it has already won from thoughtful members of the community. That groups of individuals so diverse in ordinary interests as social workers, clergymen, doctors, lawyers and scientific men, should have found a common basis of co-operation is in itself a stimulus to enthusiasm and also a guarantee of the value of the movement. Likewise it is an indication that the more effective handling of social problems is a matter of some urgency.

If it were possible to analyse the sentiment back of this co-operation we would doubtless obtain a very striking and rather practical view of the hopes and ills of humanity.

From the point of view of the student it is important that the social hygiene movement should be considered in a sufficiently comprehensive way. It is worth while pointing out that an organization is most usually known from one or two of its functions, but such a view as, for example, that the social hygiene movement exists solely for the purpose of conducting a campaign against certain types of disease would be wide of the mark. The student will find, irrespective of his future vocation,



plenty of opportunity for observational study of social tendencies, good, bad and indifferent, and being alert to the issue is not likely to fall into the error of the average person who takes both himself and his environment for granted.

It would be better for the student to reflect that in contrast to ordinary types of adjustment which are taking place constantly in societal organization, there are various maladjustments which, generally speaking, have been looked upon as conditions to be put up with, or by thoughtful people, problems to be solved. These conditions have been understood rather than defined as injurious influences which are a natural accompaniment of societal organization, but which react unfavourably upon it; subversions of normal use and purpose of the social mechanism. They have been studied both as regards their current effects upon society and also as regards their racial significance. At the present time control methods are being suggested in more direct reference to the working fields of public health, social service and education. As time goes on there will doubtless be more searching inquiries into a variety of cognate matters, for example economic causes, social psychology, and adjustment to natural law.

It is not at all unlikely that the social hygiene movement will fulfil much, if not most, of its purpose by the encouragement of the study of social questions as live issues of the present day. There are so many discrepant ideas current as to the stability or instability of human nature, coupled with the not uncommon tendency to read the moral history of mankind backwards, that it is scarcely to be wondered at that the average citizen must despair of having the same interest in humanity as human beings as he has of humanity in relation to arts, crafts and industries. He is continually in the position of having to be alert to the modernness of motor-cars all the while that his brain gives free storage to thoughts and notions of some antiquity. Human progress must be studied in all respects in the same way, but it is an essential pre-requisite of doing so that the natural lines of persistence, progress and deterioration should be clearly defined.

In view of the urgency of the case it is fitting that the social hygiene movement should have directed its first efforts to a frontal attack on the so-called social diseases and their insidious underground relations, also that it should be primarily identified as an extension of public health service. But the economic, moral and eugenical phases of the work are in reality more fundamental, and as such deserve a great deal of attention. In fact it is these phases which give the social hygiene movement real and permanent value.

Concerning the economic side it may be observed that social maladjustments are, and so far as one can see, always have been associated

with that extra or plus element of personal privilege which, varying in its incidence from time to time, always reveals its character by consistently claiming a little more than the protective mechanism of society can afford. The well-known combinations of dirt, disease and poverty, the social diseases and certain other communicable diseases caused by micro-organisms, are perfectly clear from any ordinary point of view of medicine or of public health. The economic causes are, however, largely untouched. A word to the wise is no longer sufficient. So long as no one's private interest is affected, and private philanthropy creates in the donor the happy glow of beneficence, there will always be plenty of suppliants.

Again the suggestion may not be unwarranted that in one way or another the moral supports of society should be more generally studied from a constructive, but mostly secular and public point of view. This does not mean that the ordinary associations of moral and religious training are ineffective, but rather an acknowledgment that they have already done double duty in the face of what sometimes seems to be a hopeless display of public, and especially parental indolence. The reference of the moral issue to the social hygiene movement will doubtless appear to some as outside of the real purpose, but the moral issue nevertheless is fundamental.

There is at present a rather widespread notion that the influences determining character are not so effective as they used to be. A good many educationists are beginning to be more reflective as to physical moral and aesthetic issues in education where formerly they were satisfied with intellectual results. Many churches seem to be giving more attention to the psychological effects of their teaching as against the confusion of modern tendencies. At least some parents, too thoughtless of youthful wilfulness, have had brought home to them the circumstance of their own incapacity for self-discipline. The situation is intricate, far more so than many imagine. It is also filled with trivial misconceptions which it is the duty of educated opinion to seek to remove.

Notwithstanding the importance of the sanitary, economic and moral issues, it is probable that the greatest demand upon intellectual leadership, in so far as the social hygiene movement is concerned, will be in the direction of disseminating knowledge regarding mental and physical degeneracy in the racial sense.

Twenty-five years of intensive research in biological science has made clear the physical basis of human inheritance. From a societal point of view the facts are in most ways encouraging of our best aspirations. In some respects they are disquieting, because they run counter to some of our commoner ideas about human equality, personal freedom, and philanthropy.

Human inheritance, from the racial standpoint, may be good, or bad. It is a mistake to think of the matter as if only pertaining to distant generations and therefore of minor importance; the case is important now. We already have the accumulated effects of all previous times.

The numerical incidence of good and bad qualities in successive generations may be mathematically expressed, and, within ordinary limits of error, foretold. Statistical data are being collated for family histories through five or more generations of many mental and physical defects, including types of feeble-mindedness, epilepsy, deafness, blindness, and criminality. The line of demarcation between accidental defect in the individual and hereditary defect, which is of absolutely fundamental importance from any constructive point of view, is being every day more clearly drawn. We have data showing the peculiarities, and more especially the increase in the birth-rate in families of degenerates, the percentages they represent in institutions of public charity, the cost of their upkeep, their relations to the classes of offenders known as "repeaters", prostitutes, drug-addicts, and alcoholics.

This class of information is difficult of application, not because it lacks anything of clearness to those who try to understand its implications, but because it strikes crosswise of what we ordinarily, and most likely erroneously, conceive to be democratic principle. It also excites prejudice on the part of many people who, while rightly insisting upon their own convictions, wrongly overlook the importance of the facts. To such sentiments educated opinion can have but one reply. The laws of nature are unbeatable. If our conceptions of freedom or of philanthropy are such as to encourage degeneracy in any respect, it will be in keeping with the outlook of social hygiene that these conceptions should be changed. There is little comfort to our ideals of intellectual honesty in the thought that later we shall be better prepared to face the music.

The social hygiene movement has a particular reference to educational practice. Not only will the education of the youth always be a principal consideration, but also the educationist, who has been trained to think about and work for particular effects, will have a great advantage. This advantage lies, not so much in a small—but very important—field of instruction in personal hygiene, as in the larger field of character building and its application to sturdy moral citizenship. The advantage exists also because the educationist is able to see the normal attitude, reactions, and aspirations of youth in their proper perspective, a matter of some importance nowadays in view of the varied manifestations of a sort of muddled confusion of external points of view. Finally, the educationist is able to train effectively those mental qualities which, owing to the

vigour and adaptability of the youth, respond quickly, and also to encourage those physical and mental inhibitions, which are absolutely essential to personal and to social hygiene, and which in the youth can be made to develop in a natural wholesome way.

These considerations, it will be observed, have a very broad significance, inasmuch as they apply almost without reservation to all periods of the maturity of pupils and to all lines of educational effort irrespective of their normal content and outlook.

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# The Sanitary Inspectors' Association of Canada

## THE TREND OF MODERN FOOD INSPECTION

By ARTHUR RIGBY, M.R., San. I., *Chief Food Inspector, City Health Department, Winnipeg, Man.*

THE trend of modern food inspection is not to stop at the apparent effects of any abnormal condition but to find out its origin and follow it through to its ultimate results, and if possible to prevent its recurrence.

For instance, food poisoning cases often are referred to by newspapers as "Ptomaine Poisoning." It is now conceded by the best experts that "ptomaine poisoning" is extremely rare.

"Ptomaine" poisoning infers that a person is suffering from the effects of the ingestion of foods contaminated with the products of proteid putrefaction.

In an article published by the Privy Council Research Board of Great Britain of the investigation into 100 cases of food poisoning in Great Britain, out of this number only 3 gave evidence of decomposition. I hope you will pardon me if I quote somewhat freely from this article because I regard its account of the omissions and commissions of food investigations as so very typical of what I wish to say.

In the Preface the Author says: "I have often felt if we are to prevent the more or less frequent occurrence of food poisoning, that we must find, if possible, the different ways by which these organisms gain access to food stuff, and do what we can to prevent this." "It is not enough to find out the cause of a disease, the guarding of Public Health demands that as far as possible, we should take steps to prevent a recurrence."

When we follow the backward trend of food inspection, it leads us into the misty realms of time, because man has always consumed vegetable foods, and probably meat foods nearly as long.

When man picked his fruit off the tree and killed and ate his meat immediately after slaughter, there was no need of food inspection. Man himself is the greatest contaminator of food stuffs, and the conditions under which he keeps, kills and handles his food animals, is a contributory factor.

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\*Read before the Annual Convention, Brantford, Ontario

The first authentic records of a system of food inspection was among the Egyptians, who prohibited the use of the meat of certain animals as unclean. No doubt these laws were prefigurative of the Mosaic Law. The Jews have the next oldest law, and the custom of having the Rabbi kill and inspect their meat animals is still in force today. I shall not weary you with a recital of the history of food inspection since the early Jewish period, because the other laws were very intermittent.

The first attempt at a modern system of meat inspection was inaugurated by the U.S. Government in 1890 owing to the objection to the prevalence of *Trichina* in food imported from there to Europe. The Canadian law was passed in 1900. Inspection included, as it still does, ante- and post-mortem inspection. It is rather interesting as showing the big strides made in meat inspection that *Trichina* which was responsible for the inauguration of inspected export meat, is today hardly ever seen. Three outbreaks of Trichinosis are reported in Canada in the last 15 years.

When we consider the long list of diseases to which animals are heir, the specific diseases communicated by the ingestion of animal foods are few. They consist of T.B. Cystic diseases and *Trichina*. As will be pointed out later as proved in experimental work, the stomach has wonderful protective powers, and cases are known of diseased meats being ingested with impunity, when, if the virus had been injected into the blood stream, it would have been attended with disastrous results.

Ostertag<sup>3</sup> quotes how out of 300 to 400 persons who partook of the meat of an animal affected with Anthrax, only one woman, who received an injury to the forearm in cutting up the meat, contracted the disease. A dog which received a scratch on the nose while fighting over a bone, contracted infection of that organ.

The meat of animals affected with Rinderpest, Foot and Mouth disease, have been ingested with equally harmless results.

The most important, and at the same time the most difficult, is the elimination of meats from animals suffering from some septic disease, such as Navel Ill or the febrile conditions accompanying parturition. As these conditions are localized, they are very difficult to detect, except at the time of slaughter, when all the organs are present. Incidentally, it might be pointed out that the trend of modern inspection not only supervises our meats, but releases for our use healthy glands. Diabetes, Hemorrhage, and shock, are only some of the conditions alleviated by the products of healthy glands.

Improved conditions of transportation and refrigeration alter the whole aspect of Food Inspection. Slowness of transport used to prevent perishable foods travelling. Fresh foods could only be utilized locally. Adulteration, with the exception of milk, was practically unknown.



Now, a knowledge of the origin, climate, production, diseases, insecticide sprays, transportation, preservation, artificial treatment in factory, and diseases of which food may be the carrier, right down through the wholesaler and retailer, is necessary, and if this is multiplied by the number of food stuffs, one gets some idea of what modern Food Inspection means.

One salient fact appears, that the more food is handled, the greater danger of contamination by man. After the specific diseases which may be contracted by man from meats, the most important is what is known

as

#### FOOD POISONING

This condition may be caused either by chemical or bacterial action. Of these, each has its more or less characteristic symptoms, though, as will be pointed out, one has to be very careful in jumping to conclusions. Bacterial poisoning may be due to the action of one of several groups of bacteria, and these again may be divided into strains. In the Salmonella group, 150 strains have been investigated. Various groups may be more prominent in different countries, for instance, the Salmonella group is the greatest offender in England, while Botulism, a quite common condition in the U.S., is practically unknown in the former country, only one case, the Loch Maree case, at any rate being given any prominence.

The Salmonella group derives its name from Dr. Salmon, an American Pathologist, who was responsible for the discovery that *B. Suipestifer*, which had been looked on as the cause of Hog Cholera, was only a secondary condition. The group includes among others, the organism commonly mentioned in accounts of English food poisoning cases *B. Aertrycke*, and the one most often mentioned in literature on this side of the water—*B. Enteritidis*. The Lancet<sup>3</sup> in discussing this subject says, "nine out of 10 outbreaks are due to the Salmonella Group." Investigations reveal certain factors useful in tracing the path of infection.

- B. *Aertrycke* produces disease in cows, calves, and rats.
  - B. *Enteritidis* produces disease in mice, guinea pigs, and birds.
  - B. *Newport* produces disease in dogs.
  - B. *Suipestifer* requires special conditions such as mass infection.
- (At the same time several investigators have shown that these organisms are not normal inhabitants of the intestines of healthy animals.)

In a case of poisoning in New York last year from consuming pork and beans, organisms of the hog cholera group were reported. The objectionable feature of the Salmonella group is what one might call their insidious character. Were the death rate as high as in the cases of Botulism, greater

interest would be taken. While in experimental work with *B. Aertrycke*, it has been possible to create a certain amount of immunity, a greater sensitiveness oftentimes results, and last year certain isolated cases where the rest of the consumers ingested the food with immunity, gave a history of previous infection. The conditions caused by this group may be either caused by an infection or an intoxication. An infection implies ingestion of the organism, an intoxication only the products or toxins of the organism. The intoxication is generally more acute but quickly recovers. The infection is more insidious, the time of incubation is longer and results more serious.

The importance of this group in connection with food poisoning, is not due to any abnormal resistance to heat of the bacilli, since they do not form spores and are an easily destroyed organism, but is essentially associated with their ability to multiply very rapidly on food stuffs, to their powerful endotoxins, and in particular to their peculiar and very unusual ability of these endotoxins to resist temperatures as high as 100° without having their poisonous properties diminished.

In the investigation to which I previously referred, there were 17 cases of canned food poisoning from toxins as the Bacteria were killed. We had an experience of a ham being partaken of all week and causing sickness on the last day to the persons consuming the remains, although there was no evidence by sight, taste or smell of anything unusual. When one considers how in England game is eaten in a stage of putrefaction, that the Chinese eat what we would call rotten eggs, and the Malays consume fish in an advanced stage of decomposition, we are left to wonder whether we should not revise our ideas regarding the harmfulness of decomposed products, apart from the esthetic feature.

Rettger<sup>6</sup> has repeatedly stated that only anaerobes produce putrefaction.

Vehicles of infection naturally composed a wide range with 42 from canned foods. Out of the 100 cases<sup>6</sup> 31 were due to toxins. Only in one case did canned food contain living bacilli. The suitability of the vehicle as a medium for multiplication is important. Infection may be delayed, due to the fact that where small numbers of bacilli are ingested, they may be destroyed, whereas if the food is left at a suitable temperature for incubation, it may become virulent. Among vehicles of infection reported in this and other countries, are articles such as duck's eggs and cake contaminated with rat virus.<sup>7</sup>

The summer season seems the most susceptible, 72 cases occurring from May to October. Reasons suggested are:

1. A greater virulence of the strain in hot weather.
2. Greater multiplication in suitable temperature.
3. Greater opportunities for infection.

## 4. Greater susceptibility of the alimentary tract.

Dr. Geiger<sup>8</sup> points out the wide difference between the clinical symptoms of this group poisoning, and that of Botulism:

*Paratyphoid Group*

sudden onset  
nausea  
vomiting  
abdominal pain  
prostration  
diarrhoea  
rise of temperature  
low death rate

*Botulism*

delayed onset  
weakness  
disturbance of vision  
paralysis of throat  
constipation  
subnormal temperature  
pain rare  
high mortality.

The collection of information after a reported case should include:

1. Portion of food implicated and the containers,
2. Information *re* appearance of food before consumption,
3. History of the different foods,
4. Post Mortem materials from fatal cases,
5. Samples of blood and feces from affected cases,
6. History of previous infections.

## HUMAN CARRIERS

Cases reported in England indicate that human beings may be carriers of food poisoning organisms. L. P. Lockhart<sup>9</sup> found that the virulence of the *B. Aertrycke* may be increased as the result of animal passage. This was indicated in the case of the servant girl carriers in England. He also found different strains vary in virulence.

One might dwell on the subject of "carriers" as the cause of infections, especially Typhoid; particularly could one enlarge on the very inadequate legal provisions for preventing these becoming a public danger. The experience one gains over a term of years prevents one entertaining, with any degree of equanimity, the idea of having one's food handled by persons affected with certain social diseases.

BOTULISM<sup>10</sup>

*Botulinus Bacillus* first isolated by Van Ermegen in sausages was thought to be an organism associated with meat foods. Now no kind of food seems immune. The organism is widely distributed. It is an anerobic, so grows well in an exhausted container. It forms spores which are highly resistant to heat. Mayer claims a temperature of 230 to 240 F. for 30 minutes is necessary to destroy these. It gives off toxins which

differ from the toxins of the Salmonella group, in that they are destroyed at the ordinary boiling. Sometimes in practice, however, the interior of the food does not reach this temperature. I have personally seen live worms in codfish which the person declared she had cooked for 30 minutes. It is never in fresh foods, as the organism takes time and special conditions to incubate.

As stated before, an attack of Botulism has characteristic symptoms. It differs from Salmonella poisoning in that the affected food often gives off a peculiar rancid smell, though many cases are reported where nothing abnormal was noticed. Authorities recommend heating canned foods in the original container before opening, as the vacuum enables a higher temperature to be reached than would be possible in an open vessel.

#### OTHER TYPES OF FOOD POISONING BACTERIA<sup>11</sup>

In five cases bacilli of the true dysentery type or allied strains were isolated. The point emphasized is that organisms of definite dysentery type may be met with as the cause of food poisoning outbreaks, which in their clinical symptoms, are not distinguishable from Salmonella group outbreaks.

Streptococci<sup>12</sup> organisms may be responsible for food poisoning. Two cases were reported last year from cheese. In one case, 22 people were affected. Cats in experiments proved extremely susceptible.

Locally we had a combined infection of *B. Proteus* and Streptococci. I was called up by a Medical man who said he had a case of Botulism and suspected some tomato catsup. On reaching the place, I found 2 cases had been sent to the Hospital, while three were laid around in various stages of collapse. On examination, nothing abnormal was found in the catsup, but the Bacteriologist reported luxuriant growth of *B. Proteus* and *B. Streptococci* from the ham, which proved pathogenic for guinea pigs.

*B. Proteus* has often been suspected in food poisoning cases, but in experiments, 25,000,000,000 per c.c. have been fed without effect.<sup>13</sup>

Ostertag,<sup>14</sup> however, describes how the products of *B. Proteus* seem to increase the virulence of streptococci organisms.

One of my earlier experiences of food poisoning emphasized the importance of authentic details.

I was called up one Sunday by a Medical man who said he had four people poisoned by eating cheap chewing gum. On investigating, I found that the gum was out of a box from which a portion had been sold without any complaints. I, therefore, investigated the rest of the food eaten. All the foods used were home made and cooked. My attention was attracted to a ham which had been bought the previous Monday

and partaken of all the week. The lady was positive, however, that only two of those affected had eaten any on the day of the outbreak. As I expected, the chewing gum was normal, and when I explained this to the lady, she said she had found out that the persons affected were the only ones to eat the ham, of which being normal in appearance and odor, and believing her story, I had omitted to take a sample.

#### TULARAEMIA

One can hardly leave the subject of bacterial poisoning without making some reference to Tularemia, a disease assuming some prominence in the Southern States. It may be spread by flies from infected rabbits, or acquired by contact, and a case reported this year,<sup>14</sup> where 3 died out of 4 affected, leaves it open to conjecture whether it may not be acquired from the ingestion of insufficiently cooked diseased rabbit. Scientists call attention to the extraordinary resemblance between the *Tularensis* Bacillus and the organisms which respectively cause Malta Fever and Abortion in cattle.

#### AVIAN T. B.

While on the subject of indirect infection, I would like to draw attention to the prevalence of Avian T.B. While most Scientists believe that the avian type is not pathogenic for human beings, there are several records to the<sup>15</sup> opposite as regards fresh eggs from tubercular fowl eaten in a raw state. For some years, I have supplied T.B. fowl to the Manitoba Medical College, but so far, they have failed to grow the organism experimentally. The point still remains that infected fowl may be bought by the housewife and in eviscerating the same, the organism never having been exposed to drying or sunlight, is still virulent, and can easily soil the hands and cloths employed. Several authorities comment on the virulence of Avian T.B. for hogs. While guinea pigs are resistant, rabbits and mice are susceptible.

#### SENSITIVENESS TO CERTAIN FOODS

While on the subject of food poisoning, might I point out that some people develop a sensitiveness to different foods. Some develop a rash on eating fish foods, others on eating strawberries, others again cannot eat oatmeal. On investigation, one finds that the foods implicated are protein in nature, although cases are on record where the condition is hereditary.

#### POISONING BY CHEMICAL AGENTS

This includes a wide range, Zinc, Arsenic, Belladonna, Copper, Lead, all more or less common. Then we have the Alkaloids of mushrooms, potatoes, parsnips.

*Zinc* poisoning is most common in galvanized iron containers. It is easily influenced by any form of acid.

*Arsenic* occurs in a wide variety of foods such as glucose, baking powders, due to improper manufacture, or it may be added to otherwise wholesome foods in the form of insecticide spray. I remember some years ago on the day before Xmas, a man wandering into the office and enquiring "what this stuff was" indicating the green spray on a bunch of celery. I told him it was copper sulphate, as we had tested it a few days before. However, I sent it over to the Chemist, who immediately reported that the spray was heavily impregnated with arsenic. On getting in touch with the first individual, he told me that the reason he enquired, was that a Doctor had phoned in from the country and said that he had three patients poisoned due to eating celery. We immediately got busy and had the whole carload rounded up at 12:30 Xmas day.

May I here express my appreciation to the Food & Drug Division of the Federal Health Department, for their assistance in getting the regulation passed that all imported celery must be examined for sprays previous to release from customs.

Cocoa is sometimes treated with Potassium Carbonate to retain the color. Should this be impure, the cocoa may contain arsenic.

*Copper*<sup>18</sup>—We have had several cases of copper poisoning, notably one at a church gathering where they cooked the chickens for a chicken pie in a copper boiler, and then left to cool. Falconer points out that copper oxidizes rapidly at the point where acid or fatty materials being boiled are exposed to the air.

*Lead* is sometimes found in foods where impure sulphuric acid is employed in the manufacture.

*Belladonna*<sup>19</sup> in herbs and from rabbits which had eaten belladonna are reported.

Poisoning<sup>18</sup> from ingestion of potatoes either sprouted or which had acquired poisoning properties by exposure to the sun, are not uncommon. Incidentally, I might mention that potatoes and vegetable foods in cold storage are sometimes rendered unfit for consumption by the escape of ammonia or the pipes having been newly pitched.

*Mushroom* poisoning is so well known that it is hardly necessary to mention it. The outstanding feature is that none of the popular tests, such as peeling, coloring spoons, etc., are reliable. The only test is experience. Mushrooms with a ring on the stem and a cup at the root are particularly noted for their poisonous properties.

Certain species of peas and beans contain poisonous alkaloids.



## PRESERVATIVES

One of the outstanding features of our modern diet is what might be called its "sophistication" by the use of preservatives, adulterations, coloring agents, and refining methods.<sup>19</sup>

The President of the British Medical Health Officers' Association in addressing a meeting said:

"The use of preservatives in food has greatly increased, and there are now so many preserved foods in daily use that while the preservative added to any single food may not be injurious, the cumulative effect of consuming several foods containing such preservative may be and in my opinion, is prejudicial to Health. Moreover, certain persons are intolerant to the drugs or preservatives used in food, and very small doses may have an effect on them."

"I am myself satisfied that a preservative in sufficient quantity to retard decomposition and inhibit the growth of putrefactive and other organisms must have a damaging effect on the gastro-intestinal tract."

"And I am inclined to think that the increasing prevalence of affections of the stomach and intestines, such as duodenal ulcer, appendicitis, and colitis, are not unconnected with the ingestion of chemical preservatives."

The findings of the Departmental Committee of the Ministry of Health in Great Britain are interesting. They say in part:

"Formalin and fluorids should be prohibited because they are definitely toxic born preparations on account of their cumulative action and salicylates on account of their powerful physiological action."

"The Committee are not unreasonable, they recognize the difficulties of traders with a lack of cold storage, but when they employ preservatives, only the least harmful should be employed. When it comes to imported boracised eggs, they take the bold line of prohibition. Science has given mankind many blessings, but among these officers of Health do not reckon Chinese liquid boracised eggs."

## FLIES

So much has been said and written about flies that anything said seems like vain repetition. Yet in view of the manner in which many people take flies as a matter of course, enough has not yet been said on the subject.

Until people appreciate the fact that flies spend their time between

animal wastes and animal foods, how they regurgitate their former meal in order to moisten their present meal, we must still give out information about flies. Flies are definitely convicted of spreading Typhoid by contaminating food, and are suspected of contributing to the spread of other summer diseases.

Our experience is, that flies live in the adult stage through the winter in bakeries, and other warm places. I have seen hundreds caught in January in a few days on sticky papers in a bakery.

#### VITAMINES

Experiments conducted the last few years indicate the important part played by food accessories known as vitamins. My personal experience with feeding frozen wheat or ergoted rye to animals, gives one a wholesome respect for the effects of food deficiencies. The food one eats the first few years largely influence the physical attributes. The food one eats the last few years largely determine the health and mental attitude.

Briefly, the result of expert opinion is that every day a person should ingest some food in which the vitamins have not been affected by heat or other form of food preservation. The time may well come when cognizance of the effect of preservatives on vitamins will engage the attention of Health Authorities.

#### UN SOUNDNESS IN FOOD

The question often arises as to when food has reached the condition when it is unfit for consumption. In trial cases, it is often pointed out that they consume eggs in China, game in England, and cheese in other countries which we would usually consider unfit for food. At the risk of wearying you, I have attached a charge to a Jury by the Judge in a judgment entered in the U.S.A. September, 1923, in regard to 1000 cases of sardines which had been seized by the Federal authorities as consisting in whole or in part of a filthy decomposed and putrid (animal) substance, as follows:

"The Act says whatever is decomposed shall be subject to seizure and condemnation." I don't know a great deal about these matters of chemistry, but nearly everything of an animal character is decomposed to a certain extent on different occasions. As soon as fish is dumped into the bottom of a boat and allowed to remain for a little while, the process of decomposition sets in. Of course, it isn't that kind of decomposition the Act has in mind, because if it were, there wouldn't be anything like the sale of animal products, but it is such decomposition as in the minds

of the Jury, it seems to me, would make them unfit for food. It does not have to be *poisonous*, it does not even *have to be so unfit* as to render it dangerous to *health*. That isn't necessary. The Act does not make that condition a precedent to the seizure and condemnation. There ought to be, it seems to me, such decomposition as in the minds of an intelligent Jury of business men having due regard to the evidence and to the exhibit itself, would ordinarily suggest itself to them as an article unfit for human food. If it does that, then there ought not to be any question of condemnation. If the thing itself is decomposed only to that inevitable degree, that is inherent in the packing of fish products, then of course, they ought not to be condemned because that would practically stifle commerce on these articles altogether. The Chemists from the Department have testified as to the causes of this particular decomposition, and it is up to you to say whether the decomposition has gone to the extent where it is not necessarily dangerous, but to such an extent as to render it unfit for food.

In conclusion, when we review the various functions of the body and brain, we find that they in turn are governed by the stomach and other organs. We do not tell the stomach when food is not suitable, it tells us. What and when we eat still governs to an extraordinary extent, the most important function of our life—the pursuit of Health and Happiness.

I may point out that Scientists are generally agreed that a suitable dietary free from adulteration is one of the most important items if we are to extend the prolongation of life and offset those diseases which are incidental with our over refined and devitalized foods. In accomplishing this object, the trend of Modern Food Inspection should play no mean part.

*The following References are respectfully acknowledged*

- 1-6-11-17—Food Poisoning, A study of 100 recent outbreaks, Savage & White.
- (2) Ostertags Handbook of Meat Inspection
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- (4) Food & Drug Review, September, 1924.
- (5) American Journal of Public Health, November, 1924.
- (7) American Journal of Hygiene, January, 1924.
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- (10) Botulism as the Food Offices Problem, by C. Thom, Bureau of Chemistry. Department of Agriculture, U.S.A.
- (12) Food & Drug Review, June, 1926.
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- (14) U.S.A. Public Health Report, February, 1924.
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## Monthly Jottings of the Sanitary Inspectors' Association of Canada

The Winnipeg members are enjoying their weekly meetings. Quite a little discussion takes place at the close of each paper or address and this makes the meetings much more interesting.

There is an increasing desire on the part of Inspectors in the East to get the Sanitary Inspector's certificate. We have received several requests as to courses of instruction. There must surely be a number of men in the East, as there are in the West, who are capable of conducting classes with a view to preparing students for examination. We would be glad to receive any information on this matter.

In a class conducted by one of our members in the West, the following course of study was undertaken. The class was carried on for a period of about seven months, giving two hours on one evening each week:—

October	8—Water and water supplies.
	15— " " " "
	22—Air and ventilation.
	29— " " "
November	5—Drainage and sewerage.
	12—Plumbing.
	19— "
	26— "
December	3—Sewage disposal.
	10— " "
	17—Communicable Diseases.
January	7— " "
	14—Disinfection.
	21— "
	28—Calculation of cubic space, etc.
February	4—Refuse collection, removal and disposal.
	11—Meat and Food inspection.
	18—Dairying.
	25—Public Health Law
March	4— " " "
	10—Class examinations commence.

We are printing the above in order to give students some idea of the subjects and extent of study preparatory to sitting for examination. The Manitoba Board of Examiners of the Royal Sanitary Institute conducts examinations at any time, on the request of candidates and doubtless similar arrangements can be made in other parts of the country.

# The Saskatchewan Health Officials' Association

## PROBLEMS OF THE TOWN AND RURAL MEDICAL HEALTH OFFICERS IN THEIR RELATION TO THE ASSOCIATION

Paper read by Dr. J. H. Skaling, M.H.O., Sutherland, Sask., before the First Annual Convention.

I have been asked to discuss the usefulness of the newly organized Saskatchewan Health Officials' Association in solving some of the problems of the town and rural Medical Health Officers.

What are the Medical Health Officers' problems? Primarily they come under the classification of Disease Prevention. Under this heading we could consider Sanitation, Infectious Diseases, Food and Water Supplies and the regulations governing them.

Let us outline the machinery we have at our disposal to handle these various departments and successfully co-ordinate them to achieve the end we desire. We have our Dominion and Provincial laws and the agents who administer them. We have our local councils and our local constables and sanitary officers who enforce the local laws. We also have our educational system which includes the elements of sanitation and hygiene in their curriculum.

Thanks to the wise judgment shown by our legislators, our Dominion and Provincial Health laws are fairly comprehensive, but they do leave loopholes and oft-times the onus of the prosecution is thrown on the M.H.O. In every community there are certain folks like Paddy who are "agin the government". They consider themselves above the law and any attempt to enforce quarantine, sanitation or the proper handling of food products results in open rebellion and defiance. What shall be the M.H.O.'s attitude? Clearly it is to enforce the law; but at what a price to the M.H.O. who is often the goat in such cases! He is subjected to criticism and frequently loses good paying patients which he can ill afford to lose in return for the small stipend he receives as M.H.O. Some scheme should be devised (and here the Saskatchewan Health Officials' Association comes in) whereby such matters would be handled by a special provincial official who would have jurisdiction over certain areas and could be called in to settle such disputes.

Generally speaking, the town and village councils are composed of citizens who fall in line with the suggestions of the M.H.O., but in some of our towns a few dollars look bigger than human health and happiness. One can see the dollars, but the other is intangible, and to some folks

it is a fallacy to spend good dollars for sanitation and serums that human health may result. We still have our doubting Thomases who think it a wild extravagance when the M.H.O. suggests having the water of every well in town tested, or a regular examination of the milk supplies of the town made.

We cannot blame them, in some respects, for a town or village councillor is an embryo politician, and we can be thankful that he has not acquired the spending mania which some politicians acquire when they sit in the seats of the mighty. These good men who direct the affairs of smaller communities do not realize the value of spending, say, one hundred dollars for serum to protect every child in school from diphtheria. If the facts were laid before them in proper form their attitude would be changed. Here our Association would be of service in arranging literature especially for the guidance of town and village councillors covering sanitary problems, the value of serums and kindred subjects. This might also be arranged through the Provincial Government in arranging pamphlets for the citizens' guidance through the local health committees.

Our biggest ally in work of this nature is Education. So many of our citizens are still not convinced that dirt causes flies and flies cause fever. They are receiving indirectly through their children the information that is given them in their hygiene classes. Why could not our Association arrange lectures and demonstrations for the children and adults? I am sure the Provincial department of health would co-operate in every way.

While dealing with this matter of education might I be permitted to mention the problem of the New Canadian. Here, as good citizens, we have a glorious opportunity to do real service for Canada. These folks should be reached and they should be taught Canadian standards of living. The Town Council, the Community Club, the School, the Public Health Nurse, the M.H.O., all should work together to provide the necessary lessons in Canadian citizenship. Here, again, the Association and the Government should unite to have demonstrations and lectures in their own language, if necessary, to aid these people to discard their old customs and acquire the newer Canadian idea of a home.

As M.H.O.'s we are still supposed to be ethical and consider financial matters last and yet this problem affects us all vitally. There is no set of fees arranged, and the M.H.O. must accept the stipend his predecessor received and carry on no matter what calls upon his time may arise. Certain communities are very considerate, but others expect so much. Could the Association not draw up a schedule to guide the Council and the M.H.O.? It would form a basis on which to work and a better understanding would result.



These are a few of our problems. Others could be considered. Others will be arising from time to time, and it is a step in the right direction to have this Association to whom we can refer for guidance.

Perhaps you have other suggestions to make, other solutions of the problems I have discussed. Bring them out and let us discuss them together.

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# The Canadian Council On Child Welfare

## NEWS NOTES

### THE SECTION ON THE CHILD IN EMPLOYMENT

This section of the Council has been working in close co-operation with the Technical Education Division of the Federal Department of Labour, in an endeavour to awaken wider public interest, throughout the provinces, in the extension of vocational guidance, technical training and juvenile employment services.

For the present year, the Council is endeavouring to obtain adherence of the nine Canadian provinces to the International Child Labour Conventions, in the drafting of which Canada was represented by government delegates, employers and labour representatives. The standards promulgated in seven of these Conventions affecting child labour all fall within the exclusive legislative jurisdiction of the provincial governments. Therefore, before Canada can give her adherence to standards that fall, in many instances, below the standards and practices of some of her provinces, it will be necessary for the Conventions to be accepted by the provinces, and for the latter to notify the Federal government of their acceptance of these standards.

The Council has issued a comprehensive schedule setting forth exactly what action is necessary in each province to make adherence possible in the case of each Convention. Copies of this schedule with an explanatory statement are being supplied to all provincial welfare organizations likely to be interested.

The Conventions and Recommendations for the acceptance of which the Council is working may be summarized as follows:

(1) That the Minimum age for admission to industrial employment shall be fourteen years.

(2) That night work shall be prohibited for young persons under eighteen years of age, who must be guaranteed ten hours' rest at night.

(3) That agricultural employment of children under fourteen years of age shall be prohibited during school hours.

(4) That children under fourteen years of age, employed in agriculture, shall be guaranteed ten hours' night rest, and children under eighteen years, nine hours' night rest.

(5) That women and young persons under eighteen years shall be excluded from employment exposed to dangers of lead poisoning.

(6) and (7) That maternity should be protected by the prohibition of the employment of women in industry, or agriculture, for six weeks preceding and six weeks following childbirth, and by the payment of maternity benefits, where needed.

*Publications issued in January*

"Special Classes for School-Age Children in Need of Special Care." Dr. S. B. Sinclair.

"Canada and the World's Child Welfare Work." Charlotte Whitton. (A joint publication with the Social Service Council of Canada.)

"Teaching International Relationship." (A joint publication with the League of Nations Society on teaching league ideals to school groups.)



## The Provincial Department of Health of Ontario

Communicable Diseases Reported for the Province for the Weeks  
Ending December 4th, 11th, 18th, 25th.

COMPARATIVE TABLE

Diseases	1926		1925	
	Cases	Deaths	Cases	Deaths
Cerebro Spinal Meningitis.....	—	3	2	—
Chancroid.....	1	—	—	—
Chicken Pox.....	1247	—	597	—
Diphtheria.....	317	23	286	25
Encephalitis.....	1	1	5	2
Gonorrhoea.....	117	—	148	—
German Measles.....	19	—	19	—
Influenza.....	—	17	—	31
Measles.....	1095	1	489	—
Mumps.....	147	—	295	—
Pneumonia.....	—	165	—	197
Poliomyelitis.....	2	—	—	—
Scarlet Fever.....	534	5	558	13
Septic Sore Throat.....	3	1	10	—
Small Pox.....	106	—	32	1
Syphilis.....	86	—	74	—
Tuberculosis.....	113	50	166	62
Typhoid.....	42	6	53	5
Whooping Cough.....	410	4	113	7

The following Municipalities reported cases of Small Pox:

Timmins 7, Peterboro 18, Harvey Tp. 2, Ottawa 5, March Tp. 1, Galt 1, Pickering Tp. 2, Oshawa 3, Toronto 30, E. York Tp. 2, Morris Tp. 1, Portland Tp. 8, Kingston Tp. 2, Belleville 12, Ameliasburg 2, Percy Tp. 1, E. Garafraxa Tp. 2, Carleton Place 3, Gosfield N. Tp. 2, New Liskeard 2.

JOHN W. S. McCULLOUGH.

**Communicable Diseases Reported for the Province by the Local  
Boards of Health for the Year 1926.**

COMPARATIVE TABLE.

Diseases	1926		1925	
	Cases	Deaths	Cases	Deaths
Cerebro Spinal Meningitis.....	37	23	43	27
Chancroid.....	11	—	25	—
Chicken Pox.....	7787	—	5356	2
Diphtheria.....	2818	179	3031	207
Encephalitis.....	21	16	67	47
Gonorrhoea.....	1539	—	1708	—
Influenza.....	—	388	—	250
German Measles.....	3223	—	168	—
Measles.....	18420	42	12413	17
Mumps.....	1784	—	6160	—
Poliomyelitis.....	71	6	92	6
Pneumonia.....	—	2169	—	1946
Scarlet Fever.....	5640	38	5449	80
Septic Sore Throat.....	18	1	55	2
Small Pox.....	706	3	218	4
Syphilis.....	1256	—	1302	—
Tuberculosis.....	1660	*821	1931	931
Typhoid.....	581	32	859	70
Whooping Cough.....	3679	67	3827	97

\*Only 50 per cent. reported.

## News Notes

### *Great Britain*

Dr. Alfred Greenwood, C.M.O., in his latest Annual Report to the Kent County Council, draws attention to the startling difference in the rates of infant deaths among legitimate and illegitimate children, respectively.

In 1925 the death rate for legitimate children was equal to 53 per 1,000 births as compared with a rate of 125 for illegitimates.

He states that "on the broad basis of child welfare, then, it is asserted that *this rate is too high*: and every consideration should be given to possible means for its reduction in the near future."

"Clinical Research in its Relation to the Public Health Services" was the topic of an address given recently by Major Walter Elliot, M.P., at the James MacKenzie Institute for Clinical Research.

He noted that for the first time in history "research" figured on the Agenda of the Imperial Conference. He felt that clinical research should not be regarded as something apart from the practice of medicine but rather that it should grow and flower out of the daily work of practitioners.

Major Elliot stated that in Scotland £2,860,000 had been spent on nutrition in the year 1926. Major Elliot gave as his conclusions:

- (1) That public health work will increasingly concern itself with research.
- (2) That control, especially super-imposed control, will of necessity fail, and opportunities for work are the most that organizations can hope to offer.
- (3) The independence of scientific institutions ought to be jealously guarded so as to provide the necessary check on the rapidly increasing undertakings of state research.

### *United States*

A joint meeting on the subject of "The Relation of Venereal Diseases to Vision Impairment" was held by the American Social Hygiene Association and the National Committee for the Prevention of Blindness, during the American Health Congress, in 1926. So far as we know, this gathering was the first public joint meeting on the subject of the relation of the venereal diseases to the impairment of vision, and the enthusiastic attendance foretells the popularity of such meetings in the future. Both organizations avow their readiness to co-operate with official and volunteer agencies interested in the eradication of the venereal diseases and the prevention of blindness.



## IN WHICH CLASS DO YOU BELONG?

Few persons enjoy really perfect health, declares Dr. William Everett Musgrave, in *Hygeia* for February. For many generations physicians have divided people into groups according to their state of health. Some of these, based on current conditions and knowledge, follow:

1. Healthy persons. These are persons who have no discoverable defects; they constitute the smallest group.

2. Persons who think themselves healthy but nevertheless have significant impairments. This large group is most in need of examination and treatment and will benefit most from competent health service.

3. Well and near-well persons who believe themselves more or less sick. This group, including neurasthenics, hypochondriacs and faddists, are prominent supporters of fakers and are in the vanguard of emotional health innovations of all kinds.

4. Ill persons who refuse to acknowledge the fact. Some of these people are more dangerous to society than a cook with leprosy.

5. Well and near-well persons who pay attention to their health only when overtaken by symptoms they cannot ignore. This group is decreasing in size.

6. Persons with obstinate or chronic complaints who are inexperienced, careless, easily discouraged or unfortunate in being badly advised. They lose the advantage of early treatment by wasting time on nostrums.

7. The sick. These persons are sick and realize it from their symptoms.

## FATHER CAUSES HALF OF CHILDLESS MARRIAGES

Inability to have children, one of the most prominent causes of failures of marriages, may be due to a number of conditions. Overweight has sometimes been associated with this deficiency and in some cases reduction of weight has resulted in the ability to have children.

Congenital disarrangements of the internal organs may make it impossible for women to conceive. A correction of the structural conditions results in success.

Among the most frequent causes is infection of the father or mother. Inflammation closes the tubes that carry the reproductive cells. Now it is possible to see these tubes with the X-ray and to discover whether or not they are closed. Sometimes it is possible to open the tubes by surgical methods.

Investigations of more than 700 cases indicated the husband as responsible for the inability to have children in at least one-third of the

cases and possibly in one half. The prospective father should have a full examination before operative or technical investigative procedures are undertaken on the mother, advises *Hygeia*.

#### *Canada*

The film, "The End of the Road" is now being shown under the auspices of the Canadian Social Hygiene Council in the Western Provinces. It has already been shown in Moose Jaw, Regina, Yorkton, and Kenora in Saskatchewan, and will shortly be presented in Estevan, Winnipeg, Beinfet, Weyburn, Brandon and Regina.

Reports indicate that great interest is being shown in this film.

The following is an interesting quotation from Dr. George E. Vincent's address at the Annual Meeting of the Canadian National Committee for Mental Hygiene:

"Child Guidance Clinics are being established to influence parents. The children referred to these clinics present diverse problems—uncontrollable passions—peculiar habits, and so on. I visited a Child Guidance Clinic and had an illustration of its work. A child was being studied who had a passion for putting things up its nose. I don't know whether an old snuff-taking ancestry was responsible. At any rate, the parents were anxious because sometimes they could extract articles from the child's nose and sometimes they couldn't. The problem for the mental hygienist was to get the child interested in some less hazardous and less exciting form of pleasure. The child was about five years old and I have often wondered concerning the outcome. Perhaps if the child had been provided with only croquet balls for its amusement it would ultimately have become discouraged."

#### *Halifax, N.S.*

"Some people howl their heads off about 'personal liberty' when it comes to prohibition or vaccination. From the mess some people make of what little 'personal liberty' they have, one would reasonably expect an outpouring of gratitude that there is no more. What with 770 murders, 962 suicides, 31,257 reported cases of venereal disease, 5,006 cases of diphtheria and some more similar data concerning the results of 'personal liberty' activities in Illinois last year, it seems that the range of individual choice in some directions at least is wide enough."

*Illinois Health News.*

There is being made an active attempt to bring about the signatures of the petition asking that the Province of Nova Scotia be made a "restricted

area" and that all cattle be subjected to the tuberculin test. During the coming few weeks the eastern portion of the Province from (and including) Halifax and Hants Counties will be the scene of this special effort.

This is a matter of great interest to the medical profession and one concerning which the opinion of the practitioners will be many times sought. They can indeed do much towards bringing about freedom for tuberculous disease among the cattle of the Province.

The argument from the viewpoint of health is that which must appeal most strongly to the medical man. There is ample justification for the procedure if weight of authority is the criterion. And it is extremely difficult to establish the contention that our very high tuberculosis records are not caused at least in part by the infection of our cattle which we are now trying to eradicate. If this infection is responsible for our losses or any of them, there is no time like the present for rooting it out of our herds. It can be done now, if we accept the opinion of those who are best acquainted with the subject. Perhaps it cannot be done later if the infection becomes more widespread.

There are few physicians practising in the Province who have not seen cases of tuberculous disease which they thought probably to have originated from some cattle infection. If they now make a special effort to assist those desirous of making the Province a "restricted area" they may be able to prevent the occurrence of such cases in the future.

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## Book Review

*Serum Diagnosis of Syphilis by Precipitation*, by R. L. Kahn, Sc.D., Immunologist to the Bureau of Laboratories, Michigan Department of Health. Williams & Wilkins Company, publishers. Cloth, gold stamped, illustrated. Price \$3.00.

This volume is a comprehensive review of the problem of precipitation tests for syphilis beginning with the elementary work by Klausner and ending with the author's test, the evolution of which is described in detail and the final technique set forth. A great deal of original work is reported concerning the factors affecting the test, and many statistics are reported comparing the results of this method of diagnosis with the well established Wassermann test. The final chapter summarizes the main points brought out in the volume, emphasizing certain factors which make for success in using the test and suggesting lines along which further investigation is indicated.

The whole volume is a conservative statement of the author's views, and while the conclusion would indicate that he considers his test to be the most efficient yet brought forward, there has already been sufficient experience in other laboratories to show that his contentions are in the main well founded. I think most laboratory workers agree that the Kahn precipitation test for syphilis has been proved to parallel the Wassermann test in about 95 per cent. of sera. There are some who agree with the author in advocating discarding the Wassermann test in favor of this simplified procedure. The reviewer has had considerable experience with the Kahn test and believes it to be worthy of a permanent place in the diagnosis of syphilis, but at the present time still inclines to the view that it should be used in conjunction with the Wassermann test rather than displace it.

This book, however, should be in the hands of every laboratory worker and all those who are interested in the practical and theoretical considerations of this problem.

H. K. D.

# Editorial

## EDUCATION FOR PARENTHOOD

Of recent years the attitude of thoughtful people towards health and longevity has changed. Disease and death not so long ago were visitations of the Almighty. Whenever they occurred they were to be accepted with as much equanimity as possible. If the doctor with as ample a supply as possible of nauseous remedies could not restore health then there was nothing more to be done about it. To-day, of course, we feel that the situation has changed and that the importance of preventive machinery is recognized more and more.

One cannot but feel, however, that in spite of our vaunted progress there must in the future be a change not only in the magnitude of our preventive operations but also in our methods. We are not spending enough money on health measures. We have not a sufficient number of whole-time health officers. Insufficient time is given to the matter by our service clubs, our legislative assemblies and our public men. People generally should be more interested in what the health authorities are doing. All of this is true.

It would seem that a serious criticism of present methods is, that health work does not on the whole start soon enough. Medical inspection of schools, well-baby clinics, periodic health examinations—all of these with the development of public opinion which they represent as they become effective, mean definite progress but in spite of all such methods lives are cut short both in the earlier and later decades of life because of mistakes for which their unfortunate victims are not responsible.

Oliver Wendel Holmes made a sapient statement once to the effect that a child's education should begin several generations before he is born if it is to be effective. Without necessarily going back quite so far as Dr. Holmes suggested it is true nevertheless that the health of the child of the present generation is very largely the result of the way he chose his parents—or to be more accurate the result of the thoughtfulness or otherwise of his parents when they chose one another and took on the serious business of parenthood.

The trouble has been, of course, that prospective parents in the past have scarcely thought of themselves as parents until after they have already achieved that exalted state. Children have come, healthy or otherwise, to parents who are ignorant of the most elemental facts about baby feeding and who are utterly aghast when faced with the

task of eventually making useful citizens out of these little morsels for whose reception they are too often quite unprepared.

Marriage and parenthood are responsibilities which are generally undertaken all too lightly. Very few young couples contemplate marriage with sound ideas as to the task which they are about to assume. Little attention is paid to the matter of physical or mental fitness for marriage and to the matter of education for parenthood practically none. The results are tragic. Aside from unnecessarily high infant mortality rates the divorce courts and juvenile delinquency are sinister results.

It is high time that the whole question of developing a scheme for the care of children before they are born be gone into. Young people should be taught to believe that the carrying on of the race is one of the most significant duties of mankind on this earth and that marriage means assuming serious responsibilities. Education for parenthood should be one of the great health measures of the future.

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#### THE MOVING PICTURE AND HEALTH EDUCATION

Amid all the criticism to which the modern moving picture is subjected one wonders that the many opportunities for the constructive use of moving pictures dealing with health are neglected. The newer methods of disease prevention, such as toxoid inoculation, as well as vaccination, typhoid inoculation, water purification, pasteurization of milk and many other measures are all suitable for pictorial representations. The need for public education along these lines is surely sufficiently obvious.

Some day soon one hopes someone in the health field with a reasonable amount of initiative will realize that thoughtful consideration of the matter may well result in a plan which will make moving pictures on health subjects the rule rather than the rare exception in moving picture theatres. Short pictures carefully prepared could be made interesting as well as useful and might easily be utilized before or after features in place of much now used that is useless.

At the present time the only pictures of the health type one can recall are that hardy perennial the "End of the Road"—a standard length feature picture which is again attracting record audiences in Western Canada, and one or two other pictures of a similar type.

On the whole, the short moving picture dealing with health has not been made available for popular audiences. Something should be done about it.



